



**HAUSRATH
ECONOMICS
GROUP**

MEMORANDUM (revised)

Date: January 21, 2005

To: Loren Clark, Placer County Planning Department

From: Sally Nielsen

Subject: **Projections of growth and land conversion for urban development in Placer County through 2050**

This memorandum summarizes projections of population and employment growth and estimates of land conversion for urban development prepared for the economic analysis of the proposed Placer County Conservation Plan (PCCP). Hausrath Economics Group (HEG) prepared projections of population and employment growth for Placer County from the base year (2002) through 2050 and estimates of growth from 2002 through 2050 for the PCCP Phase 1 planning area (western Placer County) based on those county totals. The estimates of land conversion for the PCCP Phase 1 planning area represent the acres of residential and non-residential development and associated infrastructure that would accommodate projected growth in the Phase 1 planning area through the year 2050. This memorandum presents the projections and land conversion estimates and describes the sources and assumptions used to generate the numbers.

The projections represent one possible scenario for long-term growth in Placer County, assuming continuation of regional growth trends and development patterns. That scenario reflects current assessments of future economic and population growth potential and development plans and proposals under consideration in Placer County and in cities in the county as of December 2004. Among other factors, changes in household composition over the longer-term and potential market responses to those changes will alter the 50-year growth scenario.

The estimates of land conversion reflect development types and development intensities (dwelling units per acre and floor-area ratios for non-residential development) that are currently envisioned in city and county general and specific plans, planning studies, and development proposals. Over the 50-year planning horizon, a number of factors will influence whether or not and how such development actually occurs on the Placer County landscape. Relevant factors include local planning policies and other development regulations, development costs (land, materials, financing, infrastructure and public facilities), availability of private capital, levels of public investment, local and regional economic activity, and market preferences. The estimates

presented in this memorandum are intended as a starting point for the PCCP analysis and reflect a reasonable scenario given current economic and planning assumptions.

BASIS FOR LONG-TERM PROJECTIONS

HEG analyzed two primary sources to develop the long-term projections of population and employment growth in Placer County through the year 2050. In 2002, the Center for the Continuing Study of the California Economy (CCSCE) conducted an economic and demographic analysis of long-term regional growth trends through 2050 for the Sacramento Area Council of Governments (SACOG) Blueprint project.¹ In May 2004, the California Department of Finance (DOF) published updated projections of population by county through 2050. HEG reviewed these materials in conjunction with Census data; estimates of current housing, population, and jobs from DOF, the California Employment Development Department (EDD), and the U.S. Department of Commerce Bureau of Economic Analysis (BEA); trend data from those sources; and SACOG's *March 2001 Projections* series, Placer County growth projections, and scenarios of regional growth by subarea prepared by SACOG for the Blueprint Project.

HEG's long-term projections for Placer County represent a scenario of demand for urban development based on analysis of economic factors, demographic trends, regional growth potential, and development patterns. The projections consider Placer County's role in the regional economy and housing market and link population growth to job growth through analysis of labor force participation and the growth of jobs relative the growth of employed residents. The projections represent a reasonable scenario of expected growth based on the assumption that a high quality of life continues to attract economic activity and new residents and that appropriate infrastructure development occurs to accommodate growth. Table 1 presents the projections developed for Placer County, as well as regional projections that provide a context for the Placer County estimates. Key determinants of the projections are summarized following the table.

¹ This analysis was presented at the SACOG Regional Forum in 2002. See *Growth Trends in the Sacramento Region: Jobs, Population, and Households 1950 – 2050*, October 18, 2002, (http://www.sacregionblueprint.org/sacregionblueprint/the_need/sacgrowthtrends.pdf).

TABLE 1 PROJECTIONS OF EMPLOYMENT AND POPULATION FOR THE SACRAMENTO REGION AND PLACER COUNTY: 2002 - 2050				
	2002 - 2050			
	2002	2050	Net Growth	Annual Growth Rate
Placer County				
Jobs by Place of Work ¹	152,000	421,000	269,000	2.1%
Total Population	278,000	616,000	338,000	1.7%
Household Population	275,000	609,000	334,000	1.7%
Six County Sacramento Region²				
Jobs by Place of Work ¹	1,086,000	2,160,000	1,074,000	1.4%
Total Population	2,065,000	4,106,000	2,041,000	1.4%
Household Population	2,024,000	4,026,000	2,002,000	1.4%
Placer Share of Regional Total				
Jobs by Place of Work	14%	19%	25%	
Total Population	13%	15%	17%	
Household Population	14%	15%	17%	
<p>NOTE: These projections represent one possible scenario for long-term growth in the Sacramento region and in Placer County, assuming continuation of regional growth trends and development patterns. The projections reflect current assessments of future economic and population growth potential and development plans and proposals under consideration in Placer County and in cities in the county as of December 2004.</p> <p>¹ Estimates of jobs (employment) by place of work include wage and salary employment, the self-employed, and proprietors.</p> <p>² In addition to Placer County, the six county region includes El Dorado, Sacramento, Sutter, Yolo, and Yuba counties.</p> <p>SOURCE: Hausrath Economics Group for the purposes of the Placer County Conservation Plan economic analysis.</p>				

EMPLOYMENT GROWTH

The estimates of long-term regional job growth are based on the CCSCE analysis for SACOG described in the baseline growth trends presentation identified above (*Growth Trends in the Sacramento Region: Jobs, Population, and Households 1950 – 2050*, October 2002). Tying regional employment growth to projections of statewide economic growth, analysis of the prospects for the region's economic base industries, and assessment of the competitive advantages of the Sacramento region, the CCSCE projects an annual employment growth rate of 1.44 percent for the six-county region between 2000 and 2050. At this rate, the number of jobs in the region would double over the 50-year period; the projection is for an increase of about 1.1 million new jobs between 2002 and 2050. The number is large, but the rate of growth represents a substantial slowing of growth in economic activity compared to preceding periods. Between 1970 and 2000, the employment growth rate for the region was 3.5 percent per year.

HEG projections show Placer County capturing 25 percent of regional job growth between 2002 and 2050. This increase in the share of regional employment growth captured in Placer County is consistent with trends of the 1990s as evidenced in State Employment Development Department data and U.S. Department of Commerce Bureau of Economic Analysis data. It is also consistent with assumptions used in the base case scenario developed for SACOG's Blueprint Project, which shows Placer County capturing 25 percent of regional job growth.² Total employment in Placer County is projected to reach 421,000 by 2050, an increase of 269,000 jobs between 2002 and 2050. The employment growth rate for Placer County slows over time; the overall rate for the long-term future (an annual rate of 2.1 percent) is about 40 percent of the job growth rate experienced in the County over the last 30 years (5.7 percent on an annual basis between 1970 and 2000).

The estimates of employment and employment growth prepared for the PCCP are larger than SACOG estimates of Placer County jobs because of some differences in methodology, although underlying assumptions about growth rates and the allocation of employment growth within the region are similar. As described above, the Placer County employment growth scenario for the PCCP is based on the long-term SACOG regional employment growth scenario developed by the CCSCE and on the assumption, consistent with SACOG, that Placer County's share of regional employment will continue to increase over time. The primary differences in methodology appear to reflect differences in base year estimates, specifically in the treatment of self-employed workers.

HEG's base year estimate of jobs in Placer County started with the estimate of wage and salary employment for 2002 reported in annual average county-level data from the California Employment Development Department (EDD), based on employer reports. Our estimate of total employment includes both wage and salary employment and self-employed workers, i.e., people who are employed but work for themselves and who are not counted in employer statistics.³ The

² Sacramento Region Blueprint Transportation and Land Use Study, Regional Forum 2004, *Tall Order, Regional Scenarios: Statistics by Subarea*, (<http://www.sacog.org/forum2004/forumbook/forumbook.pdf>). Differences in geographic coverage may mean these estimates are not directly comparable to the Placer County totals in Table 1. The exclusion of "Placer County High Country" or "Tahoe Basin" estimates from the SACOG statistics does not make a large difference, however, since these areas represent only a small part of the county totals.

³ There are a number of sources of estimates for the self-employed; each source uses different definitions. According to the 2002 Economic Census (a source of data on self-employment that measures businesses that have no employees), there were 22,000 such establishments in Placer County in 2002 (including sole proprietorships, partnerships, and corporations). The 2003 American Community Survey estimates show about 18,000 self-employed workers in Placer County, not including those whose business was incorporated. The Bureau of Economic Analysis (BEA) provides the most comprehensive estimates of the number of jobs represented by self-employment and therefore not counted in wage and salary employment estimates. From IRS tax return forms, the BEA counts the number of sole proprietorships and the number of individual business partners not assumed to be limited partners. For 2002, the BEA estimates a total of about 34,000 jobs associated with proprietors employment in Placer County. Most of Placer County's self-employed are in business as specialty trade contractors, real estate agents/brokers, accountants, lawyers, computer and other technical consultants, architects, doctors and other health practitioners, day care providers, and non-store retailers.

self-employed are an important component of the workforce. Analysis of the ability of the local economy to employ area residents is incomplete without counting the self-employed.

The U.S. Department of Commerce Bureau of Economic Analysis provides a consistent employment data series by county that identifies both wage and salary employment (based on employer reports provided to State employment security agencies—the same source for EDD estimates of wage and salary employment by county in California) and proprietors employment (based on analysis of IRS tax return forms). HEG analyzed BEA estimates for Placer County from 1969 through 2002 and based the estimate of self-employment on the ratio of proprietors employment to wage and salary employment for Placer County. That ratio was 0.26-to-1.00 in 2002. HEG projections of future employment in Placer County assume that ratio remains constant over time.⁴

POPULATION GROWTH

The CCSCE growth trends analysis for the Sacramento region (conducted in 2002) produced estimates of future population growth based on job growth, demand for labor, and assumptions about labor force participation. The result is an estimate of regional population growth of about 1.7 million people, at a growth rate of about 1.26 percent per year. The Department of Finance (DOF) released new long-term population projections for counties through the year 2050 in May 2004 that are substantially higher than those CCSCE projections.⁵ The DOF population projections are based on a demographic model reflecting recent trends in fertility, mortality, and migration. The projections are not explicitly constrained by a labor demand and supply analysis. Under the DOF scenario, regional population would grow at an annual rate of 1.68 percent from 2000 to 2050; the region's population would more than double, increasing by over 2.5 million people.

It is preferable to use a projection that integrates job growth and population growth; however, assumptions about Placer County population growth using the CCSCE regional projections directly appear too low. HEG prepared a new regional population projection that takes a middle road between CCSCE and DOF. Past trends show population growing at a slower rate than jobs, although this differential should narrow over time with the aging of the population and the consequent slowing of labor force growth. Therefore, we project regional population growth at the same annual rate as regional employment growth for the 2002 through 2050 period. This is a faster rate of population growth than projected by CCSCE in the baseline regional scenario and a slower rate of regional growth than projected by DOF. The annual rate (1.44 percent per year) is

⁴ In 1969, the ratio was 0.25-to-1.00 and went up from there, ranging from 0.35-to-1.00 to 0.43-to-1.00 from the late 1970s through the mid-1990s. The average over the 33 years from 1969 through 2002 was 0.33-to-1.00. Many factors influence this ratio, including the strength of the regular labor market, trends in early retirement, and the need to supplement retirement income. For future projections, HEG assumed a constant current ratio (0.26-to-1.00) to be conservative.

⁵ State of California, Department of Finance, *Population Projections by Race/Ethnicity, Gender, and Age for California and its Counties 2000 – 2050*, Sacramento California, May 2004.

about midway between the low (CCSCE) and the high (DOF) growth rates. Resultant regional population growth of 2 million is about midway between the CCSCE growth projection and the DOF growth projection.

For the PCCP economic analysis, Placer County captures 17 percent of regional population growth, accounting for 15 percent of the regional total in 2050—an increase in the share over time. This is consistent with past trends in regional population growth and with assumptions used in the base case scenario developed for SACOG's Blueprint Project. Using these assumptions, total population in Placer County is projected to reach 616,000 by 2050, an increase of 338,000 people between 2002 and 2050, at an annual growth rate of 1.67 percent. SACOG's population projections for Placer County in 2050 range from 561,000 in the base case scenario to 592,000 in the preferred scenario which increases the proportion of regional housing production in Placer County. The unconstrained Department of Finance projections show an even higher growth rate for Placer County (2.0 percent per year), resulting in a total population of 657,000 in 2050, an increase of about 408,000 people between 2000 and 2050.

HOUSEHOLD POPULATION

Household population for both the region and for Placer County is projected assuming that group quarters population remains a constant share of total population over time and therefore increases proportional to the overall increase in population. Household population growth for the region between 2002 and 2050 totals just over 2 million people. Capturing 17 percent of regional growth, Placer County's household population is estimated to total 609,000 in 2050, an increase of 334,000 people between 2002 and 2050.

HOUSEHOLDS

Household size is projected to decline over time, in large part due to the aging of the population, a national demographic trend. According to CCSCE demographic analysis, the aging of the population means that people aged 55 and older will become an ever larger share of the total, and older households (persons living alone and others with no children under 18 at home) will become a larger percentage of the region's households and of regional housing demand.

The Placer County household projections reflect these trends to some extent; smaller household sizes are assumed for any age-restricted housing currently planned or proposed. HEG's methodology for deriving estimates of land conversion from the capacity of city and county general and specific plans, general plan updates, and development proposals (described below) resulted in a determination to use current planning assumptions for estimates of household size and therefore of the capacity of potential development to accommodate population growth. As a result, the household growth estimates for Placer County do not fully incorporate long-term trends towards substantially smaller household sizes overall. As noted above, such changes over the long-term would result in a market response evidenced in changes in the types and densities of residential development proposed. This scenario for the PCCP analysis does not incorporate

those types of potential long-term future changes. Instead, the PCCP scenario incorporates current thinking about the characteristics of households and housing demand, as evidenced by the shorter-term planning horizon of planning studies and development proposals under consideration today.

Table 2 presents the PCCP scenario for households and household population in Placer County. The addition of 133,000 households would result in a total of 239,000 households in Placer County in 2050.

TABLE 2				
PROJECTIONS OF HOUSEHOLDS AND HOUSEHOLD POPULATION FOR PLACER COUNTY: 2002 – 2050				
	<u>2002 - 2050</u>			
	2002	2050	Net Growth	Annual Growth Rate
Household Population	275,000	609,000	334,000	1.7%
Households	106,000	239,000	133,000	1.7%
Persons-per-household	2.59	2.55	2.51	
<p>NOTE: These projections represent one possible scenario for long-term growth in Placer County, assuming continuation of regional growth trends and development patterns. The projections reflect current assessments of future economic and population growth potential and development plans and proposals under consideration in Placer County and in cities in the county as of December 2004. Among other factors, changes in household composition over the longer-term and potential market responses to those changes will alter the 50-year growth scenario.</p> <p>SOURCE: Hausrath Economics Group for the purposes of the Placer County Conservation Plan economic analysis.</p>				

The PCCP household scenario for Placer County is lower than both SACOG's base case scenario and preferred Blueprint scenario. Those scenarios show an increase of 150,000 to 160,000 housing units in Placer County between 2000 and 2050. The larger number is in the preferred Blueprint scenario, resulting from the policy direction to improve the jobs-housing balance in the County by increasing the number of housing units relative to the number of jobs. The lower household size assumptions used in the SACOG scenarios compared to those in the PCCP scenario result in lower total population estimates associated with SACOG's larger household numbers, however. SACOG's housing and household population scenarios are based more purely on a long-term demographic analysis and the intent to illustrate outcomes of planning principles, while the PCCP scenario combines long-term growth scenarios with assumptions about the characteristics of new development based on approved development projects and specific plans as well as development proposals and current planning policies.

PROJECTIONS FOR THE PCCP PHASE 1 PLANNING AREA

HEG prepared estimates of employment and population growth for the PCCP Phase 1 planning area using generalized assumptions about the western Placer share of total Placer County

employment and population.⁶ Estimates of household growth to accommodate the projected population increase are based on analysis of demographic trends in the region and on the planning assumptions incorporated in city and county planning studies and in proposals for development in western Placer County as of December 2004. Table 3 presents the resultant projections for the PCCP Phase 1 planning area. As noted above, there are a number of factors that could alter the 50-year growth scenario, but the estimates are a reasonable starting point for the PCCP analysis, given current planning assumptions.

TABLE 3 PROJECTIONS OF EMPLOYMENT, POPULATION, AND HOUSEHOLDS, PHASE 1 PLANNING AREA: 2002 – 2050				
Phase 1 Area	2002	2050	Net Growth	2002-2050
				Annual Growth Rate
Jobs by Place of Work ¹	144,000	408,000	264,000	2.2%
Total Population	250,000	574,000	324,000	1.7%
Household Population	248,000	569,000	321,000	1.7%
Households	95,000	223,000	128,000	1.8%
Persons-per-household	2.61	2.55	2.51	
Phase 1 Percentage of County Totals				
Jobs by Place of Work	95%	97%	98%	
Total Population	90%	93%	96%	
Household Population	90%	93%	96%	
NOTE: These projections represent one possible scenario for long-term growth in Placer County, assuming continuation of regional growth trends and development patterns. The projections reflect current assessments of future economic and population growth potential and development plans and proposals under consideration in Placer County and in cities in the county as of December 2004. Among other factors, changes in household composition over the longer-term and potential market responses to those changes will alter the 50-year growth scenario. ¹ Estimates of jobs (employment) by place of work include wage and salary employment, the self-employed, and proprietors. SOURCE: Hausrath Economics Group for the purposes of the Placer County Conservation Plan economic analysis.				

LAND CONVERSION ESTIMATES

Explanation of subareas

The PCCP analysis requires estimates of land conversion for urban/suburban development according to geographic areas defined for the purposes of establishing Conservation Opportunity

⁶ The assumptions about the share of total county population and employment in the Phase 1 area are based on estimates for the Tahoe and Sierra areas not covered by SACOG prepared by HEG and Placer County for the 1994 Placer County General Plan and analysis of SACOG projections by regional analysis district (2001 series).

Areas and Development Opportunity Areas under the plan.⁷ The subareas used to summarize growth projections and land conversion estimates for the Phase 1 planning area are as follows: [Note to Reviewers: This text needs to be reviewed for consistency with the January version of the administrative draft PCCP.]

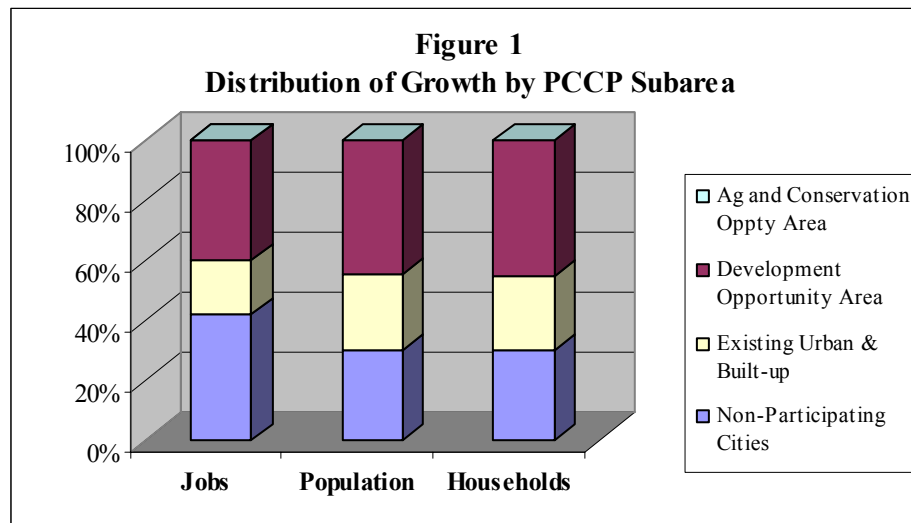
- ◆ **Non-Participating Cities:** The cities of Roseville, Rocklin, Loomis and Auburn are not participants in the PCCP. Although infill and new growth in these areas will not be covered by the PCCP permits, the PCCP land conversion estimates account for future development in these areas, providing an indication of the amount of future growth that could be accommodated within their boundaries through 2050. Development in the small remaining sphere-of-influence for Rocklin and in the Roseville sphere-of-influence area west of Roseville's current city limits are included in the growth assumptions for the Non-Participating Cities. Development in the Roseville and Lincoln sphere of influence areas that are within Placer County's Sunset Industrial Area are included in the Development Opportunity Area estimates and development in the Auburn sphere of influence area is included in the Existing Urban and Built-up area described below.
- ◆ **Existing Urban and Built-up:** This area includes existing developed parts of the participating City of Lincoln and of unincorporated western Placer County. Any land that is designated for urban use in the general plans of those jurisdictions and that is already developed or is subdivided into 20-acre or smaller parcels is included in this category. The area includes land in the spheres-of-influence of the Non-Participating City of Auburn, land in the Lincoln city limits and planning area, and areas of unincorporated development along I-80, Highway 65, and elsewhere in the Valley and Foothills zones, e.g., Dry Creek, Sheridan, Granite Bay, Penryn, Newcastle, Ophir, the Loomis Basin, and Meadow Vista.
- ◆ **Development Opportunity Area:** This area covers land that is not already "built-up" (as defined above) in unincorporated western Placer County and in the City of Lincoln planning area (including land within the current Lincoln sphere-of-influence and some surrounding unincorporated Placer County land). The northern part of the Roseville sphere-of-influence (the acreage within the County's Sunset Industrial Area) is also included in the Development Opportunity Area.
- ◆ **Agriculture and Conservation Opportunity Area:** This land in the Valley and Foothills zones is under the jurisdiction of Placer County. The Placer County General Plan designates this area for agricultural use.

⁷ See "6.2: Proposed Land Status Under the PCCP", *Third Administrative Draft Placer County Conservation Plan*, October 28, 2004, pp. 6-7 – 6-9. [Note to Reviewers: This reference needs to be updated.]

Scenario for the distribution of employment and population growth

HEG's land conversion analysis, including assessment of land use designations and planning assumptions expressed in existing adopted general plans of Placer County and the cities in the county, the proposed Lincoln General Plan Update, and planning assumptions for other potential growth areas in western Placer County, resulted in a scenario for the distribution of employment, population, and household growth within the Phase 1 planning area of western Placer County. Table 4 and Figure 1 summarize the Phase 1 planning area growth scenario according to the PCCP subareas described above.

TABLE 4 SCENARIO FOR PHASE 1 AREA GROWTH BY PCCP SUBAREA: 2002 - 2050			
PCCP Subarea	Jobs	Population	Households
Non-Participating Cities	110,700	97,000	38,200
Existing Urban and Built-up	46,900	80,700	31,400
Development Opportunity Area	106,100	143,200	58,200
Agriculture and Conservation Oppty Area ¹	0	100	30
Total	263,700	321,000	127,830
Percent of Total by Subarea			
Non-Participating Cities	42%	30%	30%
Existing Urban and Built-up	18%	25%	25%
Development Opportunity Area	40%	45%	46%
Agriculture and Conservation Oppty Area	0%	< 1 %	< 1 %
Total	100%	100%	100%
NOTE: These projections represent one possible scenario for long-term growth and the distribution of growth in Placer County, assuming continuation of regional and county growth trends and development patterns. The scenario reflects current assessments of future economic and population growth potential and development plans and proposals under consideration in Placer County and in cities in the county as of December 2004. ¹ Represents continuing rural residential development on parcels zoned for agricultural use in the Foothills zone. While much of the existing Foothills rural residential development and land already in smaller parcels is categorized as Existing Urban and Built-up, about half of the land in the Foothills Agriculture and Conservation Opportunity Area is zoned Agriculture – 10-acre or 20-acre minimum.			
SOURCE: Hausrath Economics Group for the purposes of the Placer County Conservation Plan economic analysis.			

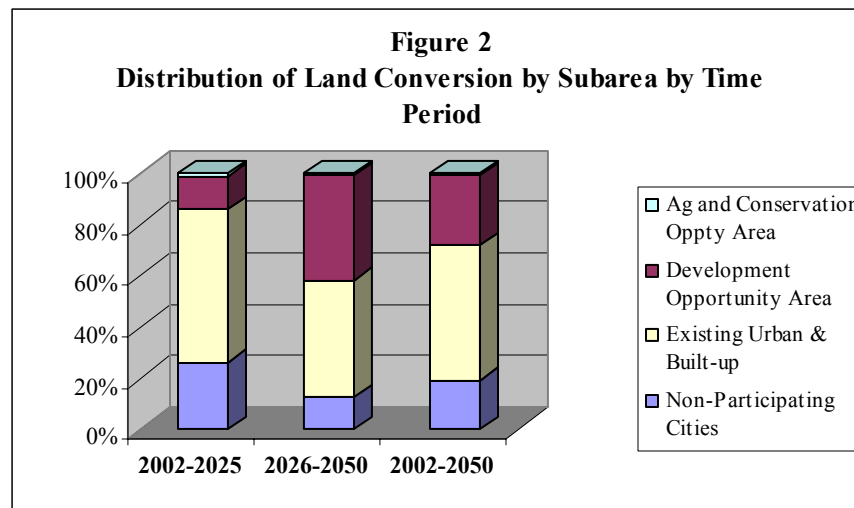


Job growth would be concentrated in the Non-Participating Cities (primarily Roseville and Rocklin) and in the Development Opportunity Area (in both the Lincoln Planning Area and in unincorporated Placer County). These Non-Participating Cities and the Development Opportunity Area would account for about 80 percent of job growth, split about equally between the two areas. Population and household growth would be more evenly distributed among the Non-Participating Cities, the Development Opportunity Area, and the Existing Urban and Built-up Areas. The differences are attributable to estimates of remaining development potential in the Non-Participating Cities, the character and mix of development planned for the Development Opportunity Area, and the predominantly residential character of the Existing Urban and Built-up Areas outside of the cities.

Land conversion scenario

Table 5 and Figure 2 summarize the estimates of the land conversion to accommodate this projected growth in western Placer County between 2002 and 2050. The acreage estimates include land for residential and non-residential development and associated infrastructure. The estimates also assume development of two college/university campuses and associated enrollment. Estimates are presented for the first part of the planning period (2002 – 2025), the second part of the planning period (2026- 2050), and for the entire period through 2050.

TABLE 5 ESTIMATE OF LAND CONVERTED TO URBAN USES TO ACCOMMODATE PHASE 1 AREA GROWTH BY SUBAREA: 2002 – 2050 (acres)			
PCCP Subarea	2002-2025	2026-2050	Total
Non-Participating Cities	8,800	4,200	13,000
Existing Urban & Built-up	20,100	15,300	35,400
Development Opportunity Area	4,400	13,800	18,200
Agriculture and Conservation Oppty. Area ¹	400	300	700
Total for Phase 1 Planning Area	33,700	33,600	67,300
Total Excluding Non-Participating Cities	24,900	29,400	54,300
Percent of Total by Subarea			
Non-Participating Cities	26%	13%	19%
Existing Urban & Built-up	60%	46%	53%
Development Opportunity Area	13%	41%	27%
Agriculture and Conservation Oppty. Area	1%	1%	1%
Total for Phase 1 Planning Area	100%	100%	100%
NOTE: These projections represent one possible scenario for long-term growth and the distribution of growth in Placer County, assuming continuation of regional and county growth trends and development patterns. The scenario reflects current assessments of future economic and population growth potential and development plans and proposals under consideration in Placer County and in cities in the county as of December 2004. ¹ Represents continuing rural residential development on parcels zoned for agricultural use in the Foothills zone, as well as direct land conversion associated with infrastructure development such as the Placer Parkway. While much of the existing Foothills rural residential development and land already in smaller parcels is categorized as Existing Urban and Built-up, about half of the land in the Foothills Agriculture and Conservation Opportunity Area is zoned Agriculture – 10-acre or 20-acre minimum. SOURCE: Hausrath Economics Group for the purposes of the Placer County Conservation Plan economic analysis.			



A total of about 67,000 acres of land would be converted for new urban development to accommodate projected growth in western Placer County through the year 2050. In the areas covered by the PCCP (areas outside the Non-Participating Cities), 54,000 acres, or 80 percent of the total, would be converted between 2002 and 2050.

This is a long time period for planning. As noted above, this estimate is based on current planning assumptions and development types and development intensities expressed in current planning documents and project proposals. There are a number of factors, including demographic changes, market forces, environmental and infrastructure constraints, and development cost and financing considerations that could result in substantial changes to these land conversion estimates, particularly over the longer-term. The estimates represent a reasonable scenario for PCCP analysis under current planning assumptions.

Under this scenario developed for the PCCP, the Non-Participating Cities would account for about 20 percent of the land conversion between 2002 and 2050. The share would be greater in the first part of the period and decrease over time as these areas approached build-out. The Existing Urban and Built-up Areas of the County and the City of Lincoln would also account for a substantial portion of the land conversion—the scenario shows about half of total land conversion occurring in those areas. This represents primarily the large amount of land conversion associated with rural residential and large-lot suburban development in unincorporated areas. The Development Opportunity Area in both the Lincoln Planning Area and in unincorporated Placer County would see an increasing amount of land conversion in the latter half of the 50-year planning period.

Differences in development density and the character of development explain the differences in the distribution of growth by subarea when land conversion estimates are compared to estimates of employment, population, or household growth. A higher development density is planned for potential growth areas within the Development Opportunity Area and in the Non-Participating Cities than is the case in Existing Urban and Built-up Areas in the unincorporated area. The comparison highlights the low density of the predominantly suburban and rural residential development pattern in the Existing Urban and Built-up Areas under County jurisdiction in the I-80 corridor (Granite Bay, Penryn, Newcastle, Loomis Basin, and North Auburn), the Foothills zone (Meadow Vista and development areas west of Highway 49), and the Valley zone (Dry Creek, Sheridan planning area). The contrast in development density explains the larger share of total land conversion compared to the share of population or employment growth that would be accommodated in the Existing Urban and Built-up Areas under this scenario.

Conclusions about this development scenario

Accommodating the projected amount of growth in western Placer County under current planning assumptions has the following implications for land conversion in the PCCP Phase 1 area:

- ◆ The Non-Participating Cities are essentially built-out by 2050, including the West Roseville Specific Plan and the rest of the MOU area (Roseville's expanded sphere-of-influence to the west and north of the West Roseville Specific Plan). This conclusion assumes currently proposed and planned development density and also assumes some amount of infill and redevelopment. Increasing development densities in the future and higher density infill development would change holding capacity assumptions for some of these Non-Participating Cities.
- ◆ In the Placer County Development Opportunity Area, population and employment growth through 2050 could absorb about 75 percent of the land already designated or under consideration for urban/suburban development. This would include land in the following major proposed development areas: Placer Vineyards, de la Salle University and Community, and Placer Ranch. Much of the remainder of the Sunset Industrial Area is absorbed as well, as is land in the proposed Curry Creek Planning Area north of Placer Vineyards.
- ◆ In the Lincoln Planning Area, population and employment growth through 2050 absorb about 85 percent of the land remaining for urban development within existing city limits and planned or proposed for urban development in the rest of the planning area.
- ◆ Substantial population growth and some employment growth occur in the Existing Urban and Built up Areas in the I-80 Corridor and the Foothills Zone between Lincoln and Auburn. This includes continued conversion of agricultural land to rural residential use. Generally, development in these areas occurs at a substantially lower density than that planned for the Non-Participating Cities and proposed for future urbanization in the Development Opportunity Area. Nevertheless, after 2050, under existing General Plan designations (i.e., before consideration of general plan changes such as those that might be proposed in the future for the Development Opportunity Area), more development capacity remains in unincorporated Existing Urban and Built-up areas than in other parts of the Phase 1 area.
- ◆ Some residential growth is shown for the Foothill Zone portion of the Agriculture and Conservation Opportunity Area. This reflects a continuation of trends that indicate rural residential development on parcels zoned for agricultural use in this area. About half (46 percent) the total land area in the Foothills Zone portion of the Agriculture and Conservation Opportunity Area is zoned Agriculture with 10-20 acre minimum lot sizes. No such conversion to rural residential use is assumed for the Valley Zone portion of the Agriculture and Conservation Opportunity Area, where there is less evidence of existing conversion, and the Agricultural zoning is primarily 80-acre minimum. The land conversion estimates for this area reflect conversion associated with infrastructure such as the proposed Placer Parkway.

Details about the estimates of land conversion

To develop the estimates of land conversion, HEG relied on estimates of population and employment that could be accommodated under existing general plans, approved specific plans, planning area studies for general plan updates, and in development proposals under consideration. Other key sources of information were the JSA existing land cover database, a database prepared by Thomas Reid Associates summarizing acres by land use designation and detailed analysis zone for all land in the PCCP Phase 1 planning area, Department of Finance January 1, 2002 estimates of housing units, households, and population for Placer County cities and the unincorporated area, and the SACOG March 2001 *Projections* series. Key sources, assumptions, and steps in the methodology for preparing the land conversion estimates are outlined below.

Estimating capacity to accommodate population and employment growth by planning area

- ◆ Summarize information on land use, population, housing, and employment from planning documents and development activity reports. The following sources of information provided estimates of the total development capacity and total potential population and employment accommodated in existing city limits (including recent annexation areas) and in various projects and planning areas: “Draft Citywide Land Use Forecast for the City of Rocklin” (DKS Associates, October 2002), and *Draft Constraints, Opportunities, and Options Report* (October 2002), prepared for the City of Rocklin General Plan Update; population and employment projections for the City of Roseville prepared by MuniFinancial in November 2001 that cover the West Roseville Specific Plan, the remainder of the MOU area, and the remaining development capacity in other parts of the City; City of Roseville *Quarterly Development Activity Report* (April 2004); land use assumptions and population and employment estimates for the proposed Placer Vineyards Specific Plan prepared by The Spink Corporation and Hausrath Economics Group for use in the Placer Vineyards Specific Plan environmental impact report; land use summaries provided by Placer County for the proposed De la Salle University and Community (May 21, 2004) and the proposed Placer Ranch (July 9, 2004); land use, population, and employment assumptions for the proposed Bickford Ranch Specific Plan from the September 1999 Draft EIR, as modified to reflect the project subsequently approved; land use information for the Sunset Industrial area from the June 1997 *Sunset Industrial Area Plan*, modified to account for annexations to the cities of Lincoln and Rocklin, and the proposed Placer Ranch project; and land use, population, housing, and employment estimates under review for the Lincoln General Plan Update, specifically, information for the entire Lincoln Planning Area, provided by the City of Lincoln, describing the “Village Alternative” (April 1, 2004), supplemented by information provided in a November 29, 2004 memorandum from Rodney Campbell, Director of Community Development, to Loren Clark.

- ◆ For the cities of Loomis and Auburn and the rest of the unincorporated area, use the detailed general plan land use database to produce estimates of acres by land use category for relevant geographic areas, considering the combination of the PCCP Analysis Zones (Non-Participating Cities, I-80 Corridor, Valley, Foothills, and Lincoln Planning Area) and the PCCP Proposed Regulatory Status areas (Non-Participating Cities, Lincoln Planning Area, Development Opportunity Area, Existing Urban and Built-up, and Agriculture and Conservation Opportunity Area). The geographic analysis also separately identified the various sphere-of-influence areas within each zone/analysis area.
- ◆ Develop estimates of the “holding capacity” for these areas by making assumptions about the intensity of development under current land use designations, about household size, and about employment density.
 - Estimate total potential housing units assuming residential development at 75 – 95 percent of the maximum development intensity allowed in each zoning category.
 - Estimate household size based on existing conditions as evidenced in DOF and SACOG information as well as assumptions about decreasing household sizes over time.
 - Estimate non-residential development assuming 90 percent of the land so-designated is developable and using floor-area-ratios of 0.30 : 1.00 for commercial land use and 0.35 : 1.00 for office and industrial land uses.
 - Estimate employment assuming 500 sq. ft. per employee for commercial use, 300 sq. ft. per employee for office use, and 750 sq. ft. per employee for industrial use.
- ◆ Develop estimates of incremental growth potential for these areas by subtracting estimates of 2002 population and 2002 employment. Derive estimates of 2002 population and employment from DOF (population for Auburn and Loomis) or from SACOG (population for unincorporated areas and employment for all areas). Use SACOG March 2001 *Projections* series, disaggregated by Regional Analysis District.
- ◆ Calculate percentages of total capacity for both population and employment represented by growth increment. Apply each growth increment percentage to estimates of residential and non-residential acres to derive estimates of the residential and non-residential acreage associated with each growth increment.

Allocating Phase 1 employment and population growth for the 2002 – 2050 period by five-year increments

The five-year increments of employment and population growth were estimated simply by assuming a constant average annual amount of growth over the projection period.

Estimating growth and land conversion by PCCP area and analysis zone

The methodology for allocating growth by geographic area was iterative, considering the distribution of growth by geographic area and over time as well as the resultant estimate of the percentage of total population and job growth potential that would occur in each area by 2050, i.e., the extent to which each area would approach build-out or the limits of “holding capacity” under current planning assumptions.

HEG prepared an analysis at a detailed level for 11 geographic areas. These areas are defined according to the intersection of the PCCP proposed regulatory status areas (Map 7, January 4, 2005) and the PCCP analysis zones (Map 8, June 25, 2004). The 11 geographic areas are listed below, along with comments that identify the jurisdiction, guiding planning documents, and relevant development proposals:

Detailed Geographic Areas for PCCP Land Conversion Analysis:

Agriculture and Conservation Opportunity Area – Valley Zone (ACO – Valley)	County
Agriculture and Conservation Opportunity Area – Foothills Zone (ACO – Foothills)	County
Development Opportunity Area – Valley Zone (DO – Valley)	Placer Vineyards, de la Salle, and Curry Creek Community Plan
Development Opportunity Area – Lincoln Planning Area (DO – LPA)	Lincoln General Plan Update, Villages Alternative
Development Opportunity Area Sphere of Influence - Valley Zone (SOI DO – Valley)	Roseville sphere-of-influence, Lincoln sphere-of-influence, and County: Placer Ranch and Sunset Industrial Area
Existing Urban and Built Up Sphere of Influence – I-80 Corridor (SOI XUB – I-80)	County: Auburn sphere-of-influence
Existing Urban and Built Up – Valley Zone (XUB – Valley)	County: Dry Creek and Sheridan
Existing Urban and Built Up – Lincoln Planning Area (XUB – LPA)	Existing Lincoln City limits
Existing Urban and Built Up – Foothills Zone (XUB – Foothills)	County: Cramer Road, Auburn Valley, Meadow Vista, and the area between Auburn and Lincoln
Existing Urban and Built Up – I-80 Corridor (XUB – I-80)	County: Newcastle, Penryn, and Bickford Ranch
Non Participating Cities (NPC)	Existing city limits of Auburn, Loomis, Rocklin and Roseville, including North Clover Valley, the West Roseville Specific Plan, and the remainder of the MOU area, and small areas of Roseville sphere-of-influence at the border of Placer and Sacramento counties

- ◆ Summarize increment of total employment and population growth potential (increment of remaining capacity for growth under current planning assumptions, developed according to the sources and methods outlined above) by the 11 geographic areas.
- ◆ Develop assumptions about the allocation of Phase 1 area employment and population growth to each of these areas, by time period (see Table 6). Assume no development in the Development Opportunity Areas before 2005 and then show a gradual increase over time.
- ◆ For each time period, apply percent distribution of growth by geographic area to the total increment of employment or population growth estimated for that time period.
- ◆ Summarize resultant employment and population growth for the 2002 – 2050 period by geographic area and review results in light of total increment of employment and population growth potential and in light of resultant overall distribution of results by geographic area. Make adjustments as appropriate.
- ◆ For each geographic area, calculate percentage of total employment and population growth potential represented by 2002 – 2050 growth. Apply this percentage to the estimate of the future development increment of non-residential and residential acres in each geographic area based on the land use data from plans, planning studies, project proposals, and the general plan land use database. The result is an estimate of total non-residential and residential land converted to accommodate employment and population growth between 2002 and 2050. Note that in the Development Opportunity Area and any other areas where land use plans are specified or proposed, the acres assumed to develop do not include acres designated in those plans for open space or conservation uses.
- ◆ Add non-residential to residential acres in each geographic area. Add campus acres in appropriate locations. Apply 15 percent factor to account for public uses, infrastructure, and rights-of-way in the Development Opportunity Area and the Lincoln Planning Area. Add acreage to account for direct land conversion associated with the proposed Placer Parkway project. The resultant sum is an estimate of total land conversion associated with urban/suburban development to accommodate projected employment and population growth between 2002 and 2050 in the Phase 1 planning area.
- ◆ Evaluate results by adding these estimates of future land conversion to estimates of existing urban development (according to the JSA database) and comparing the total to estimates of total land area by PCCP Area and Analysis Zone. Adjust as appropriate.

TABLE 6

ASSUMPTIONS FOR ALLOCATING EMPLOYMENT AND POPULATION GROWTH BY GEOGRAPHIC AREA AND TIME PERIOD: 2002 - 2050

Distribution of Employment Growth by Geographic Area

Geographic areas for land conversion	2002-2005	2005-2010	2010-2015	2015-2020	2020-2025	2026-2030	2030-2035	2035-2040	2040-2045	2045-2050	2002-2025	2026-2050
ACO – Valley	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ACO – Foothills	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DO – Valley	0.0%	2.0%	2.0%	6.0%	8.0%	12.0%	14.0%	15.0%	17.0%	18.0%	3.6%	15.2%
DO - Lincoln Planning Area	0.0%	1.0%	7.5%	10.0%	15.0%	23.0%	28.0%	25.0%	26.0%	26.0%	6.7%	25.6%
SOI DO - Valley (Sunset)	0.0%	2.0%	7.5%	10.0%	12.0%	17.0%	17.0%	21.0%	21.0%	21.5%	6.3%	19.5%
SOI XUB - I-80 (Auburn)	10.0%	8.0%	5.5%	5.0%	5.0%	3.0%	3.0%	3.0%	5.0%	5.0%	6.7%	3.8%
XUB – Valley (County Dry Crk/Sheridan)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
XUB - Lincoln Planning Area	10.0%	15.0%	15.0%	15.0%	12.5%	10.0%	8.0%	7.0%	6.0%	5.0%	13.5%	7.2%
XUB - Foothills (County)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
XUB - I-80 (County)	5.0%	2.0%	2.5%	2.0%	2.5%	2.0%	2.0%	2.0%	2.5%	2.5%	2.8%	2.2%
Non Participating Cities	75.0%	70.0%	60.0%	52.0%	45.0%	33.0%	28.0%	27.0%	22.5%	22.0%	60.4%	26.5%
Total Phase 1 Planning Area	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
NPC + Lincoln	85.0%	86.0%	82.5%	77.0%	72.5%	66.0%	64.0%	59.0%	54.5%	53.0%	80.6%	59.3%

Distribution of Population Growth by Geographic Area

Geographic areas for land conversion	2002-2005	2005-2010	2010-2015	2015-2020	2020-2025	2026-2030	2030-2035	2035-2040	2040-2045	2045-2050	2002-2025	2026-2050
ACO - Valley	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ACO - Foothills	0.02%	0.03%	0.02%	0.03%	0.02%	0.03%	0.02%	0.03%	0.02%	0.03%	0.3%	0.3%
DO - Valley	0.00%	2.00%	12.98%	15.97%	18.98%	24.00%	29.98%	36.97%	38.98%	39.97%	10.0%	34.0%
DO - Lincoln Planning Area	0.00%	5.00%	10.00%	15.00%	20.00%	24.00%	25.00%	25.00%	30.00%	30.00%	10.0%	26.8%
SOI DO - Valley (Sunset)	0.00%	2.00%	2.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.0%	2.2%
SOI XUB - I-80 (Auburn)	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.0%	4.0%
XUB - Valley (County Dry Crk/Sheridan)	2.00%	2.00%	2.00%	2.00%	1.00%	2.00%	2.00%	2.00%	2.00%	2.00%	1.8%	2.0%
XUB - Lincoln Planning Area	15.00%	15.00%	15.00%	14.00%	10.00%	7.97%	6.00%	4.00%	3.00%	2.00%	13.8%	4.6%
XUB - Foothills (County)	3.00%	2.00%	3.00%	2.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.6%	2.0%
XUB - I-80 (County)	10.00%	10.00%	10.00%	10.00%	10.00%	8.00%	6.00%	6.00%	6.00%	6.00%	10.0%	6.4%
Non Participating Cities	65.98%	57.97%	41.00%	34.00%	30.00%	25.00%	23.00%	18.00%	12.00%	12.00%	45.8%	18.0%
Total Phase 1 Planning Area	100.00%	100.00%	100.00%	100.00%	100.00%	100.0%	100.00%	100.00%	100.00%	100.00%	100.0%	100.0%
NPC + Lincoln	81.0%	78.0%	66.0%	63.0%	60.0%	57.0%	54.0%	47.0%	45.0%	44.0%	69.6%	49.4%

SOURCE: Hausrath Economics Group for the Placer County Conservation Plan economic analysis.